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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/608,011	06/30/2000	Hong-Ta James Chan	194027US3	9552

22850 7590 05/15/2003

OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.  
1940 DUKE STREET  
ALEXANDRIA, VA 22314

EXAMINER

BRUENJES, CHRISTOPHER P

ART UNIT PAPER NUMBER

1772

DATE MAILED: 05/15/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/608,011

Applicant(s)

CHAN ET AL.

Examiner

Christopher P Bruenjes

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 06 March 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 10,11,15,19 and 22-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 10,11,15,19 and 22-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

**DETAILED ACTION**

***Election/Restrictions***

1. Applicant's election of Group II Claims 10-21 in Paper No. 9 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

***WITHDRAWN REJECTIONS***

2. The 35 U.S.C. 112 rejections of claims 10-21 of record in Paper #7, Pages 3-5 Paragraph 4 have been withdrawn due to Applicant's amendments and arguments in Paper #9.

3. The 35 U.S.C. 102 rejections of claims 10-15 and 19-21 in Paper #7, Page 6 Paragraph 5 have been withdrawn due to Applicant's amendment in Paper #9.

4. The 35 U.S.C. 103 rejections of claims 16-18 in Paper #7, Pages 7-9 Paragraph 6 have been withdrawn due to Applicant's amendment in Paper #9.

**NEW REJECTIONS**

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 10-11 and 25-26 are rejected under 35 U.S.C. 102(b) as being anticipated by Ageheim et al (WO 93/09948).

Ageheim et al anticipate a shaped article in the form of tubes and containers for fuel transport and storage (p.1, 1.1-10) comprising a barrier material comprising polyamide, polyester, or EVOH (p.3, 1.30-35 and p. 4, 1.1-4) in contact with at least a part of a surface of a substrate of a polyolefin such as polyethylene or polypropylene (see abstract). The shaped article does not have a layer of adhesive between the polyolefin layer and the barrier layer (col.2, 1.48-52). Note the method of applying the barrier material to the substrate or the method of making the substrate receives little patentable weight.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
  2. Ascertaining the differences between the prior art and the claims at issue.
  3. Resolving the level of ordinary skill in the pertinent art.
  4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
6. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ageheim et al (WO 93/00948).

Ageheim et al teach all that is claimed in claim 10, and teach that the substrate polyolefin is made from polyethylene or polypropylene, but fails to explicitly teach that the polyethylene is high-density polyethylene.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to

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select high-density polyethylene as the polyethylene used in the substrate, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

7. Claims 15 and 23-24 rejected under 35 U.S.C. 103(a) as being unpatentable over Ageheim et al (WO 93/09948) in view of Hata et al (USPN 6,033,749).

Ageheim et al teach all that is claimed in claim 10, and teach that in the manufacture of containers for storage of fuel or parts having bigger dimensions than the described tubes the barrier layer is applied to the finished article (p.9, 1.14-17). Ageheim et al teach that fuel tubes as pipes for venting and the return of gases are connected to fuel containers (col.1, 1.1-10) and therefore obviously contain an opening with a cutting face. Ageheim states that the barrier layer is applied to the surface of the finished fuel tank. Therefore, the barrier resin is applied to a portion of the surface of the fuel container comprising said cutting face. Ageheim et al fail to explicitly teach that the fuel container with the barrier layer applied is a co-extrusion blow-molded fuel container comprising an interlayer of barrier resin and inner and outer layers of said

polyolefin. However, Hata et al teach that plastic fuel containers are produced by co-extrusion blow molding (col.6, 1.10-15) comprising an interlayer of barrier resin and inner and outer layers of polyethylene in order to provide sufficient barrier properties for oxygen containing gasoline (col.1, 1.27-50). Blow-molded containers have a pinch-off part cutting face on the surface where the container is held in the mold during the process and Ageheim states that the barrier layer is applied to the surface of the finished fuel tank. Therefore, the barrier resin is applied to a portion of the surface of the fuel container comprising said cutting face. One having ordinary skill in the art would have recognized that a fuel container is formed by blow molding comprising an interlayer of barrier resin and inner and outer layers of polyethylene in order to provide sufficient barrier properties for oxygen containing gasoline, as taught by Hata et al.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the applicant's amendment was made to apply the barrier layer of Ageheim et al to the fuel container of Hata et al as taught by Ageheim et al, and to produce that fuel container by blow molding including an interlayer of barrier resin and inner and outer layers of

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polyethylene in order to provide sufficient barrier properties for oxygen containing gasoline as taught by Hata et al.

8. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ageheim et al (WO 93/09948) in view of Kido (USPN 6,357,617).

Ageheim et al teach all that is claimed in claim 10, and teaches that the barrier layer is applied to the surface of a fuel container (p.9, 1.14-17) but fail to explicitly teach the applying the barrier layer to the cut edge of the container. However, Kido teaches that a fuel container having an opening having a cut edge comprises a layer of barrier material of EVOH, in order to provide barrier properties to the opening and the attachments connected to the opening. The barrier properties provided by the EVOH layer decrease the amount of gas diffusion through the opening and attachment portions of a fuel container. One of ordinary skill in the art would have recognized that barrier material such as EVOH is added to a cut edge of an opening of a fuel container in order to decrease the amount of gas diffusion through the opening and attachment portions of the fuel container, as taught by Kido. The gas that diffuses through the fuel container is harmful to the environment and



decreasing that gas diffusion is mandatory by regulations set by the FDA.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the applicant's invention was made to apply a layer of a barrier material of EVOH to the cut edge of the opening of the fuel container of Ageheim et al, in order to provide a barrier that prevents gas diffusion through the opening and the attachments applied to the container, as taught by Kido.

***ANSWERS TO APPLICANT'S ARGUMENTS***

9. Applicant's arguments filed in Paper #9 regarding the 35 U.S.C. 112 rejections of record have been considered but are moot since the rejections have been withdrawn.

10. Applicant's arguments filed in Paper #9 regarding the 35 U.S.C. 102 rejections of claims 10-15 and 19-21 as anticipated by Hata et al have been considered but are moot since the rejections have been withdrawn.

11. Applicant's arguments filed in Paper #9 regarding the 35 U.S.C. 103 rejections of claims 16-18 over Hata et al in view of

Kido have been considered but are moot since the rejections have been withdrawn.

### **Conclusion**

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher P Bruenjes whose telephone number is 703-305-3440.

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The examiner can normally be reached on Monday thru Friday from 8:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on 703-308-4251. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

Christopher P Bruenjes  
Examiner  
Art Unit 1772

CPB  
May 2, 2003



HAROLD PYON  
SUPERVISORY PATENT EXAMINER  
1772

5/13/03